

PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE : PRODUCT RESEARCH
PERIOD COVERED : FEBRUARY 25 - MARCH 28, 1980
WRITTEN BY : J. BOURQUIN

INSTRUMENTATION DEVELOPMENT

- Battelle type smoke pumps:

The power supply circuit for the DC motor has been designed and is presently being tested. Basically it consists of a typical feedback loop. A speed measuring device (tachogenerator) gives an output voltage which is proportional to the motor's speed. The voltage is compared with a reference and the difference (or error) signal, after proper conditioning (PID regulator), controls the output level of the voltage regulator feeding the motor. Thus, any change in motor speed causes a counteracting change in the supply voltage. As the gain of the open loop is high, the regulation is tight.

- NO-Analyzer for QC:

The HP-9810A calculator was installed. A programme has been written for NO data acquisition and computation.

J. Bourquin